

**APPENDIX 4: DEFENSE NUCLEAR FACILITIES SAFETY BOARD
CORRESPONDENCE WITH THE NUCLEAR REGULATORY
COMMISSION**

1. John T. Conway, DNFSB Chairman, to Shirley Ann Jackson, NRC Chairman, April 9, 1998.
2. Shirley Ann Jackson, NRC Chairman, to John T. Conway, DNFSB Chairman, July 14, 1998.
3. John T. Conway, DNFSB Chairman, to Shirley Ann Jackson, NRC Chairman, July 22, 1998.
(See Appendix 3 for enclosures)
4. John H. Austin, NRC, to Kenneth M. Pusateri, DNFSB, August 25, 1998.
5. John T. Conway, DNFSB Chairman, to Shirley Ann Jackson, NRC Chairman, September 9, 1998.
6. John T. Conway, DNFSB Chairman, to Shirley Ann Jackson, NRC Chairman, September 30, 1998 (w/o enclosure).

John T. Conway, Chairman
A.J. Eggenberger, Vice Chairman
Joseph J. DiNunno
Herbert John Cecil Kouts
John E. Mansfield

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

625 Indiana Avenue. NW, Suite 700, Washington, D.C. 20004
(202) 206-6400

98-0001127



April 9, 1998

The Honorable Shirley Ann Jackson
Chairman
Nuclear Regulatory Commission
Washington, DC 20555

Dear Dr. Jackson:

Congress has asked the Defense Nuclear Facilities Safety Board (Board) to prepare a report with evaluations and assessments of **proposals** to externally regulate the Department of Energy's (DOE) defense nuclear facilities. The Board and its **staff** have been working on responses to the sixteen items that Congress specified for the report in section 3202 of the National Defense Authorization Act for FY-1998 (see Enclosure). Congress referred to the Nuclear Regulatory Commission (NRC) in items 5, 15, and 16 and asked the Board to provide:

- (5) A list of all existing or planned Department of Energy defense nuclear facilities that are similar to facilities under the regulatory jurisdiction of the Nuclear Regulatory Commission;
- (15) An assessment of the comparative advantages and disadvantages to the Department of Energy in the event some or all Department of Energy defense nuclear facilities were no longer included in the **functions** of the Board and were regulated by the Nuclear Regulatory Commission; and
- (16) A comparison of the cost, as identified by the Nuclear Regulatory Commission, that would be incurred at a gaseous **diffusion** plant to comply with regulations issued by **the** Nuclear Regulatory Commission, with the cost that would be incurred by a gaseous diision plant if such a plant was considered to be a Department of Energy defense nuclear facility as defined by chapter 21 of the Atomic Energy Act of 1954 (42 U.S.C. § 2286 *et seq.*).

In addition, Congress asked for evaluations of issues and problems associated with proposed "privatization" of certain DOE defense nuclear facilities, such as the Tank Waste Remediation System (**TWRS**) at the Hanford Site, Richland, Washington. NRC is listed as licensing body for Phase II of TWRS in DOE's **draft** request for proposals.

The Board and its staff have, to date, relied upon published information in beginning to evaluate these and other issues regarding proposals to regulate defense nuclear **facilities**. To help the Board assemble all the facts **necessary** for its report, the Board would appreciate receiving **from** NRC copies of such data, reports, information, and expressions of views as the Commission believes are relevant to the Board's consideration of the items listed and external regulation in general. Among other things, the Board requests NRC to provide the following specific information:

- (1) A list of all existing or planned DOE defense nuclear facilities which NRC believes are similar to facilities currently under the regulatory jurisdiction of the NRC. For each DOE facility deemed similar, please **identify** the analogous category of NRC facilities, the current NRC regulatory requirements governing those facilities, the basis for determining that the facilities are similar, and the direct and indirect costs incurred by NRC to license and annually regulate each facility type deemed similar to a defense nuclear facility.
- (2) Since regulatory costs will be affected by the assumed regulatory (e.g., certification vs regulations without licensing vs licensing) framework, **what** framework **does** the NRC envision as appropriate for existing defense nuclear facilities? For new construction? For decommissioning?
- (3) **NRC** performed a certification for the Paducah Gaseous Diffusion Plant pursuant to 42 U.S.C. § 2297 et seq., and 10 CFR Part 76. Please provide the direct and indirect costs that were incurred by (a) the NRC, and **(b)** the United States Enrichment Corporation to develop the regulations and certification process, to implement the certification process, and to achieve compliance with the certification standards at the Paducah Gaseous Diffusion Plant. Using the gaseous **diffusion** plant as a reference nuclear facility, what is NRC's estimate of the direct and indirect costs that would be incurred if such a plant were subjected to:

Case 1, **full** commercial licensing by NRC, including comprehensive construction/operational licensing, together with compliance activity and enforcement;

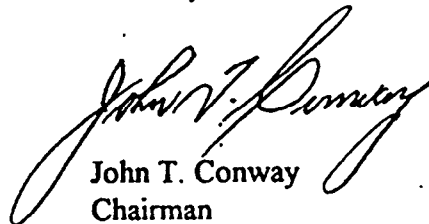
Case 2, NRC certification of plant as compliant with NRC requirements or equivalent as a condition of operations, together with compliance activity and enforcement; and

Case 3, independent NRC assessments with advisories and/or recommendations to the Department of Energy,

The Board is in the process of drafting responses to Congress that encompass the specific questions asked and would appreciate receipt of the information identified above as soon as possible. To be useful, as much of the information as possible should be in our hands within the next 60 days. As our work progresses, we may have need for additional information **from** NRC.

If you or the other NRC Commissioners have any questions about this request, the other Board Members and I are available to answer your questions and would be available to meet with you and the other Commissioners at a time convenient to you. NRC staff may contact the Board's General Counsel, Robert **M.** Andersen, at (202) **208-6387** at any time regarding this information request.

Sincerely,



John T. Conway
Chairman

Enclosure

c: The Honorable Nils J. **Diaz**, Commissioner
The Honorable Greta Joy **Dicus**, Commissioner
The Honorable Edward **McGaffigan**, Jr., Commissioner

National Defense Authorization Act for **Fiscal Year 1998**

SEC. 3202. REPORT ON EXTERNAL REGULATION OF DEFENSE NUCLEAR FACILITIES.

(a) **REPORTING REQUIREMENT-** The Defense Nuclear Facilities Safety Board (ii this section referred to as the 'Board') shall prepare a report and make recommendations on its role in the Department of **Energy's** decision to establish external regulation of defense nuclear facilities. The report shall include the following:

(1) An assessment of the value of and the need for the Board to continue to perform the **functions** specified under chapter 21 of the Atomic Energy Act of 1954 (42 U.S.C. 2286 et seq.).

(2) An assessment of the relationship between the functions of the Board and a proposal by the Department of Energy to place Department of Energy defense nuclear facilities under the jurisdiction of external regulatory agencies.

(3) An assessment of the functions of the Board and whether there is a need to modify or amend such **functions**.

(4) An assessment of the relative advantages and disadvantages to the Department and the public of **continuing** the **functions** of the Board with respect to Department of Energy defense nuclear facilities and replacing the activities of the Board with external regulation of such facilities.

(5) A list of all existing or planned Department of Energy defense nuclear facilities that are similar to facilities under the regulatory jurisdiction of the Nuclear Regulatory Commission.

(6) A list of all Department of Energy defense nuclear facilities that are in compliance with all applicable Department of Energy orders, regulations, and requirements relating to the design, construction, operation, and decommissioning of defense nuclear facilities.

(7) A list of all Department of Energy defense nuclear facilities that have implemented, pursuant to an implementation plan, recommendations made by the Board and accepted by the Secretary of Energy.

(8) A list of Department of Energy defense nuclear facilities that have a function related to Department weapons activities.

(9)(A) A list of each existing defense nuclear facility that the Board determines--

(i) should continue to stay within the jurisdiction of the Board for a period of time or indefinitely; and

(ii) should come under the jurisdiction of an outside regulatory authority.

(B) An explanation of the determinations made under subparagraph (A).

(10) For any existing facilities that should, in the opinion of the Board, come under the jurisdiction of an outside regulatory authority, the date when this move would occur and the **period** of time **necessary** for the transition.

(11) A list of any proposed Department of Energy defense nuclear facilities that should come under the Board's jurisdiction.

(12) An assessment of regulatory and other issues associated with the design, construction, operation, and decommissioning of **facilities** that are not owned by the Department of Energy but which would provide services to the Department of Energy.

(13) An assessment of the role of the Board, if any, in privatization projects undertaken by the Department.

(14) An assessment of the role of the Board, if any, in any tritium production facilities.

(15) An assessment of the comparative advantages and disadvantages to the Department **of** Energy in the event some or all Department of Energy defense nuclear facilities were no longer included in the **functions** of the Board and were regulated by the Nuclear Regulatory Commission.

(16) A comparison of the cost, as identified by the Nuclear Regulatory Commission, that would be incurred at a gaseous diffusion plant to comply with regulations issued by the Nuclear Regulatory Commission, with the cost that would be incurred by a gaseous **diffusion** plant if such a plant was considered to be a Department of Energy defense nuclear **facility** as defined by chapter 21 of the Atomic Energy Act of 1954 (42 U.S.C. 2286 et seq.).

(b) COMMENTS ON REPORT- **Before** submission of the report to Congress under subsection (c), the Board shall transmit the report to the Secretary of Energy and the Nuclear Regulatory Commission. The Secretary and the Commission shall provide their comments on the report to both the Board and to Congress.

(c) SUBMISSION TO CONGRESS- Not later than six months **after** the date of the enactment of this Act, the Board shall provide to Congress an interim report on the status of the implementation of this section. Not later than one year after the date of the enactment of this Act, and not earlier than 30 days **after** receipt of comments **from** the Secretary of Energy and the Nuclear Regulatory Commission under subsection (b), the Board shall submit to Congress the report required under subsection (a).

(d) DEFINITION- In this section, the term 'Department of Energy defense nuclear facility' has the meaning provided by section 318 of the Atomic Energy Act of 1954 (42 U.S.C. 2286g).

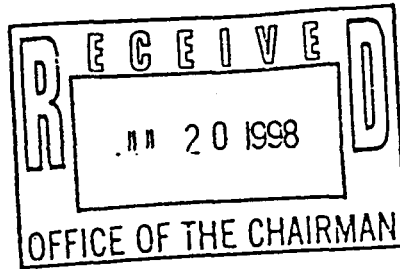


UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

Copied to All
Board Members

July 14, 1998

RECEIVED
98 JUL 16 PM 3:39
DNF SAFETY BOARD



The Honorable John T. Conway, Chairman
U.S. Defense Nuclear Facilities Safety Board
625 Indiana Avenue, NW, Suite 700
Washington, D.C. 20004

Dear Mr. Conway:

I am responding to your April 9, 1998, request for data, reports, and information on external regulation of the U.S. Department of Energy's (DOE) defense nuclear facilities. The Nuclear Regulatory Commission (NRC) has focused on the potential for external regulation of non-defense program facilities. There are no present plans for the NRC to provide external regulation to Defense Program (DP) facilities.

In order to accurately respond to Questions 1 and 2, DNFSB should provide an updated list of which DOE facilities the DNFSB considers defense facilities, along with a description of each facility's activities. Such a list would allow comparisons with existing facilities under the NRC's jurisdiction, and allow the estimation of direct and indirect costs to regulate each such facility type (Item 1, page 2). After receiving the lists as described, we will be pleased to respond to Questions 1 and 2.

Question 3 asked for the NRC's estimate of direct and indirect costs that would be incurred using the gaseous diffusion plants (GDPs) as a reference nuclear facility, if such a plant were subjected to: (a) full commercial licensing; (b) certification as compliant with NRC requirements; and (c) independent assessments with advisories and/or recommendations to DOE. This is a hypothetical question for which we have no direct experience. The review and certification of the GDPs were unique and any extrapolation of the costs incurred has great uncertainty. Therefore, the following should be taken, at best, as an educated guess.

The estimates of the cost of transitioning the two GDPs at Paducah, Kentucky, and Portsmouth, Ohio, (as provided in the August 9, 1996, letter from J. Dale Jackson, DOE, to Walter S. Schwink, NRC, enclosed) are:

<u>Activity</u>	<u>\$ thousands</u>
Application preparation	20,000
Compliance plan	8,000
NRC certification fee	7,200
Procedures and training	4 , 0 0 0
NRC Reporting System	250
10 CFR review and comment	185
NRC Office modifications	170

Costs to bring the two plants into compliance with existing DOE orders, standards, regulations and guidelines were excluded and were estimated to be about \$200,000,000. The costs provided above, attributable to coming under NRC jurisdiction, are for Portsmouth and

Paducah, The activity, 'NRC certification fee,' includes 12 full-time equivalents (FTEs) per year for four years including two resident inspectors at each site, and is for the initial certification of the Paducah and Portsmouth Plants. NRC believes this cost would be an upper limit for regulating non-DP facilities.

For the continuing oversight inspection and re-certification Of the two plants, NRC is spending about 12 FTEs *per year*, including 2 resident inspectors at each site. This level of effort could be somewhat higher if NRC were to license the GDPs. Licensing of the GDPs could require about 3 or more FTEs in addition to those expended on the certification, to address environmental issues and the learning process. Conversely, there may be some savings of resources in a licensing review since the technical issue resolution is better defined. The continuing oversight and inspection costs would remain the same. However, we have no estimate of the costs to backfit licensing requirements on the GDPs. Because of the uncertainty of costs in this area, and since the GDPs were already constructed and had operated for several decades, the certification option was chosen. If NRC were to just be an advisor making recommendations concerning the GDPs, the resources would be less and would be very dependent on the extent and complexity of any requested assistance.

In general, the costs for external regulation of a DOE facility will vary according to the regulatory mechanism applied and the means chosen to implement it. There are a variety of possible regulatory mechanisms that could be used to regulate DOE facilities including a specific license, a general license, a broadscope license, a Master Materials License, concurrence, orders, and certification along the lines of the United States Enrichment Corporation (USEC) model. On the basis of NRC's experience and practice' in applying these mechanisms to existing regulated facilities, NRC would implement these options in different ways, depending on the characteristics and risks associated with a DOE facility or activity under review. Since DOE's facilities and hazards differ widely, a "one size fits all" regulatory approach would not work. For example, broadscope licenses may be suitable for research facilities, and a specific license could be issued for spent fuel storage facilities. NRC and DOE are' about to complete the first pilot project which has taken place at the Lawrence Berkeley National Laboratory (LBNL). Among the preliminary findings are: there would be value added by NRC regulation of LBNL, the best regulatory mechanism would be through issuance of a broadscope materials license under 10 CFR Part 33, there would be cost savings to the tax payer, and NRC's costs would be about 0.6 FTE to transition to NRC regulation of LBNL and about 0.2 FTE per year thereafter. NRC believes this represents the lower bound of NRC costs to regulate DOE non-DP nuclear facilities. Further, NRC anticipates backfitting requirements only where it is necessary to improve safety.

I trust this reply responds to your concerns.

Sincerely,



Shirley Ann Jackson

Enclosure: As stated



Department of Energy

Oak Ridge Operations
P.O. Box 2001
Oak Ridge, Tennessee 37831-8651

August 9, 1996

RECEIVED
98 JUL 16 PM 3:39
DNF SAFETY BOARD

Hr. Walter S. Schnink
United States Nuclear
Regulatory Commission
MS T8A33
11545 Rockville Pike
Rockville, Maryland 20852

Dear Mr. Schnink:

**DEPARTMENT OF ENERGY ESTIMATE OF COST IMPACT FOR TRANSITION OF REGULATORY
AUTHORITY OF THE GASEOUS DIFFUSION PLANTS FROM THE DEPARTMENT OF ENERGY TO THE
NUCLEAR REGULATORY COMMISSION**

Refer to the memo from me concerning the subject transition costs dated
June 19, 1995.

This information is being provided to update the cost information provided to
you on June 19, 1995. The Department of Energy (DOE) Regulatory Oversight
Group has reviewed the previous estimate for the cost impact of regulatory
transition of the Gaseous Diffusion Plants (GDP) at Portsmouth, Ohio, and
Paducah, Kentucky, from DOE to the Nuclear Regulatory Commission (NRC), and
updated it based on current information and forecasts. The revised estimates
for these costs are shown below.

<u>Subject</u>	<u>Estimated cost</u>
Application preparation	\$20,000,000
Compliance Plan	\$ 8,000,000
NRC Certification Fee	6 7,200,000
Procedures and training upgrade	\$ 4,000,000
NRC Reporting System	\$ 250,000
10CFR76 Review and comment	\$ 185,000
NRC Office Modifications	\$ 170,000
Total	\$39,805,000

Excluded are those costs estimated to bring the plant into compliance with
existing DOE orders, standards, regulations and guidelines. The estimates
address only those activities necessary for initial certification and for
compliance with requirements in 10CFR76 which are either more rigorous than or
are not addressed by the DOE requirements. Neither does the estimate include
Costs for ongoing annual reports to Congress, etc.

This is currently the best cost estimate available. More accurate data will
be collected as the GDPs certification finalizes.

Walter S. Schwink

-2-

August 9, 1996

If you have any questions or need **additional information**, please do not hesitate to **give** me a call at (423) 241-3208.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Dale Jackson". The signature is fluid and cursive, with the first name "J." and last name "Jackson" clearly distinguishable.

J. Dale Jackson
Regulatory Oversight Manager
Office of Assistant Manager
for Enrichment Facilities

cc:

R. M. DeVault, EF-20/TRPK, DOE/ORO

J. W. Parks, EF-20, DOE/ORO

John T. Conway, Chairman
A.J. Eggenberger, Vice Chairman
Joseph J. DiNunno
Herbert John Cecil Kouts
John E. Mansfield

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

625 Indiana Avenue, NW, Suite 700, Washington, D.C. 20004-2901
(202) 208-6400

98-0002476



July 22, 1998

The Honorable Shirley Ann Jackson
Chairman
Nuclear Regulatory Commission
Washington, DC 20555

HAND DELIVERED

Dear Dr. Jackson:

We have received your July 14, 1998, letter responding in part to the Defense Nuclear Facilities Safety Board's (Board) April 9, 1998, request to the Nuclear Regulatory Commission (NRC) for data, reports, and information on possible external regulation of the United States Department of Energy's (DOE) defense nuclear facilities. Your letter states that "[i]n order to **accurately respond** to Questions 1 and 2, DNFSB should provide an updated list of which DOE facilities the DNFSB considers defense facilities, along with a description of each facility's activities." Your letter goes on to explain that once in receipt of this information, NRC will be able to provide the information requested in Questions 1 and 2 of the Board's April 9, 1998, letter.

As indicated below, most, if not all, of this information is available to the public or has previously been discussed with NRC **staff**.

Defense nuclear facilities are statutorily defined in the Atomic Energy Act, as amended, at 42 U.S.C. § 2286g

... **[T]he** term 'Department of Energy defense nuclear facility' means any of the following:

(1) A production facility or **utilization** facility (as defined in section 11 of this Act) that is under the control or jurisdiction of the Secretary of Energy and that is operated for national security purposes, but the term does not include--

(A) any facility or activity covered by Executive Order No. 12344, dated February 1, 1982, pertaining to the Naval nuclear propulsion program;

(B) any facility or activity involved with the transportation of nuclear explosives or nuclear material;

(C) any facility that does not conduct atomic energy defense activities; or

(D) any facility owned by the United States Enrichment Corporation.

(2) A nuclear waste storage facility under the control or jurisdiction of the Secretary of Energy, but the term does not include a facility developed pursuant to the Nuclear Waste Policy Act of 1982 (42 U.S.C. 10101 et seq.) and licensed by the Nuclear Regulatory Commission.

In 1991, Congress enacted the National Defense Authorization Act for Fiscal Years 1992 and 1993 (Public Law 102-190, Dec. 5, 1991) which amended the Board's enabling statute to include oversight of facilities that conduct assembly, disassembly, and testing of nuclear weapons. Thus, there are currently three basic categories of defense nuclear facilities: (1) DOE facilities which produce or produced special nuclear materials for national security purposes, which now also include facilities that assemble and disassemble nuclear weapons; (2) DOE facilities which utilize or **utilized** special nuclear materials for national security purposes, such as defense-related reactors, and now include weapons testing facilities; and (3) DOE nuclear waste storage facilities not licensed by the Nuclear Regulatory Commission. By statute, the Board has oversight jurisdiction for these facilities throughout their entire life cycle, **from** design, construction, and operation through decommissioning regardless of whether these facilities are under the control of the Assistant Secretary for Defense Programs. The Board, in its Seventh Annual Report to Congress listed priority defense nuclear facilities and activities. A copy of the relevant portion of that report is enclosed.

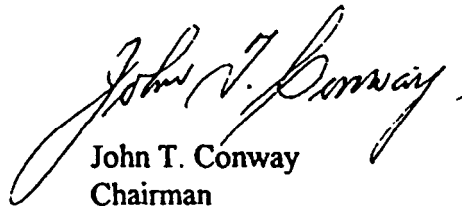
Because defense nuclear facilities have been defined by statute to include items as small as "any equipment or device" or "component part designed for such equipment or device," the Department of Energy and the Board have, for the most part, aggregated such equipment or devices at the building level, and have referred to the building or room as the "defense nuclear facility." DOE's December 1996 ***Report of the Department of Energy Work Group on External Regulation*** cited in your Memorandum of Understanding with Secretary **Peña** contains a list in Appendix J of DOE nuclear facilities managed by the Office of Defense Programs. In addition it includes those facilities managed by the Office of Environmental Management, and the Office of Energy Research.

In a presentation to NRC staff on **January 21, 1997**, Board Member Joseph **DiNunno** used, and **left** with your **staff**, view graphs **that** designated facilities as category I, **IIA, IIB, III, IV,** and V. A copy of Appendix J, annotated to show this categorization, is enclosed. Facilities marked I include operational defense nuclear facilities in the weapons program required to support the weapons mission. Those marked IIA are high hazard defense nuclear facilities required for safe materials stabilization of radioactive residuals of weapons production, waste processing, and safe storage. Defense nuclear facilities marked IIB, III, and XV are former operational facilities that are the major targets for deactivation, decommissioning, cleanup, and environmental restoration. Facilities marked V are non-defense nuclear facilities which do not fall

under the Board's oversight jurisdiction. For purposes of responding to the Board's Questions 1 and 2 of April 9, 1998, those defense nuclear facilities designated as I or **IIA** are of principal interest.

With this additional information **from** publicly-available documents, the Board hopes NRC will be able to promptly respond to initial Questions 1 and 2 contained in the Board's letter of April 9, 1998. If you or your staff have additional questions in responding to our initial request for information, please do not hesitate to contact me by phone at **202-208-6400**.

Sincerely,



John T. Conway
Chairman

Enclosures

c: The Honorable Nils J. **Diaz**, Commissioner
The Honorable Edward **McGaffigan**, Jr., Commissioner



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001
August 25, 1998

Mr. Kenneth M. Pusateri
General Manager
Defense Nuclear Facilities Safety Board
625 Indiana Avenue, NW, Suite 700
-Washington, DC 20004

Dear Mr. Pusateri:

This is to confirm our telephone conversation of August 24, 1998, establishing a meeting time of 10:30 a.m., on August 31, 1998, in your office, to discuss our information needs that would permit us to estimate the costs of regulating the U.S. Department of Energy (DOE) Defense Program (DP) facilities. This information is in addition to the information provided by John T. Conway, Chairman, U.S. Defense Nuclear Facilities Safety Board (DNFSB) in his letter to Shirley Ann Jackson, Chairman, U.S. Nuclear Regulatory Commission (NRC), dated July 22, 1998.

NRC regulates on the basis of individual radionuclides, quantities of those radionuclides, and the nature of the activities conducted at facilities, as well as other considerations. An example of the type of information we need for each facility, so we can develop accurate, regulatory costs, is shown in Enclosure 1. NRC developed this information so as to best identify which program codes, regulatory regime, and fee categories would apply to each Oak Ridge National Laboratory facility assessed during the Pilot Project of simulated regulation conducted there in the past few months. Similar information is needed about the DP facilities, so we can complete a similar analysis.

NRC has reorganized (Enclosure 2) the facilities that DNFSB provided according to the types of facilities listed in the attachment to the letter dated July 22, 1998, namely, "DOE Facility/Site Summary." From this reorganization, NRC has identified current licensees or program codes that most closely fit those types of facilities (Enclosure 3). As can be seen in Enclosure 3, a wide variety of current licensees or program codes could serve as a basis for estimating resource needs for regulating DP facilities. Resource needs for regulating this variety of licensees differ by a factor of five or more, depending on the particulars of each licensee. This would be true for DP facilities, as well. It may be that existing program codes are not appropriate for DP facilities. If not, then the level of effort is dependent on the extent to which the "areas of review" identified in Enclosure 3 are applicable to individual DP facilities. The areas of review, in turn, are dependent on the identities of radionuclides within each facility, possession limits for radionuclides, and the nature of the activities (e.g., hot cell activities, glove box activities, hood operations, and potential for criticality), and the role of structures, systems, and components in ensuring safety.

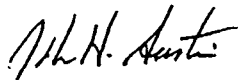
Mr. Kenneth M. Pusateri

2

August 25, 1998

I look forward to meeting with you on August 31, 1998. If you need to contact me before then, I can be reached at (301) 415-7275.

Sincerely,



John H. Austin, Deputy Chairman
External Regulation of the Department
of Energy Task Force

Enclosures:

1. ORNL Radiological Facilities
(other than REDC)
2. DOE Facility/Site Summary
3. Costs to Regulate DOE DP Facilities

John T. Conway, Chairman
AJ. Eggenberger, Vice Chairman
Joseph J. DiNunno
Herbert John Cecil Kouts
John E. Mansfield

DEFENSE NUCLEAR FACILITIES SAFETYBOARD

625 Indiana Avenue, NW, Suite 700, Washington, D.C. 20004-2901
(202) 208-6400



September 9, 1998

The Honorable Shirley Ann Jackson
Chairman
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Dr. Jackson:

As set forth in previous correspondence, the Defense Nuclear Facilities Safety Board is in the process of completing a report on external regulation of defense nuclear facilities as required by Section 3202 of the National Defense Authorization Act for FY 1998. In this regard, the Board has sought the Nuclear Regulatory Commission's (NRC) views on the questions posed by Congress concerning the comparative advantages and disadvantages to the Department of Energy (DOE) in the event some or all DOE defense nuclear facilities currently subject to Board oversight are subjected to full regulation by the NRC. Specifically, the Board requested from the NRC any direct and indirect cost data that the NRC had readily available for selected categories of NRC facilities deemed similar to the defense nuclear facilities referenced in my letter to you dated July 22, 1998.

The Board has reviewed the enclosed letter from Dr. Austin of your staff explaining NRC's regulatory approach and additional data needs in order for the NRC to develop meaningful cost data that are responsive to the Board's original request. In addition, the Board's staff met with Dr. Austin on August 31, 1998 to discuss the scope and magnitude of the effort required to research and develop the data base envisioned for projecting NRC's costs for regulating DOE defense nuclear facilities.

With the benefit of Dr. Austin's letter and his meeting with the Board's staff, the Board now has a better understanding of the difficulties the NRC has in being able to provide the Board with reliable cost estimates. Dr. Austin explained that there are few NRC facilities that are analogous to proposed or existing defense nuclear facilities, and that attempts to extrapolate regulatory costs from NRC's traditional regulatory base to those for defense nuclear facilities may result in a significant underestimation of the cost of regulating defense nuclear facilities. Dr. Austin stated in his recent letter that the NRC regulates on the basis of individual radionuclides, quantities of radionuclides, and the nature of the activities conducted at facilities as well as other considerations. It would be difficult at best for the Board's staff to apply the NRC program codes and regulatory regime to the DOE nuclear weapons stockpile stewardship and management operations, which include nuclear explosive activities and unique experiments involving co-

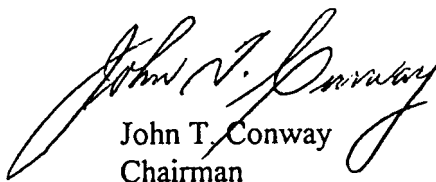
The Honorable Shirley Ann Jackson
September 9, 1998
Page 2 of 2

located high explosives and nuclear material. Unlike the facilities under NRC regulation, the risks at these defense nuclear facilities are not solely a function of the quantities of nuclear material present and associated criticality safety concerns, but more importantly, the material processes involved and the potential for explosive dispersal of radioactive materials or inadvertent nuclear detonation.

The Board understands that NRC believes it would be necessary to review information on each defense nuclear facility on a case-by-case basis in order to develop an estimate of the regulatory costs. The Board is concerned that a time-consuming and expensive effort by NRC, DOE, and Board staff to collect data on DOE defense nuclear facilities for use in extrapolating possible regulatory costs will be of questionable value for this Congressional reporting requirement. Before engaging in a review of this depth, the Board intends to solicit the views of the House and Senate Defense Oversight Committees.

The Board appreciates the NRC's attempt to be responsive to our request for projected cost data. In **view** of the submission date for this Congressional reporting requirement, the Board plans to reference the information provided by the NRC to date in its report to Congress.

Sincerely,



John T. Conway
Chairman

Enclosure: J.H. Austin to K.M. Pusateri
letter dated August 25, 1998

c: The Honorable Nils J. Diaz, Commissioner
The Honorable Edward McGaffigan, Jr., Commissioner

John T. Conway, Chairman
AJ. Eggenberger, Vice Chairman
Joseph J. DiNunno
Herbert John Cecil Kouts
John E. Mansfield

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

625 Indiana Avenue, NW, Suite 700, Washington, D.C. 20004-2901
(202) 208-6400



September 30, 1998

The Honorable Shirley Ann Jackson
Chairman
Nuclear Regulatory Commission
Washington, DC 20555

HAND DELIVERED

Dear Chairman Jackson:

In accordance with Section 3202 of the National Authorization Act for Fiscal Year 1998, I am sending you a draft report by the Defense Nuclear Facilities Safety Board (Board), which includes a response to 16 specific inquiries from the Congress **evaluating** External Regulation of Defense Nuclear Facilities.

As you' will note, the Board does not believe additional external regulation of Defense Nuclear Facilities is in the best interest of our Nation. The Board is continuing to obtain additional material and will welcome any comments you may wish to make. Your comments will be included in the final report together with your earlier letters of July 14, 1998, and August 25, 1998. While our final report may differ somewhat in details from the draft enclosed, this basic conclusion is firm.

Sincerely,

A handwritten signature in cursive script, reading "John T. Conway".

John T. Conway
Chairman

Enclosure